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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,177	02/23/2004	David Bogart Dort	VRBIA.P7B	3793
42047	7590	10/05/2005	EXAMINER	
DORT PARTNERS IP PLLC			TRAN, DALENA	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/786,177	Applicant(s) DORT, DAVID BOGART	
	Examiner Dalena Tran	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/23/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 7/22/05. As per request, claims 13, and 19 have been amended. Thus, claims 12-23 are pending.

The prior art submitted on 2/23/04 has been considered only all the US patents. However, all the foreign patent documents, and non-patent literature (sheets 2-3 of PTO 1449) have not been considered because the documents have not been received yet. Submission is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 19 recites the limitation "non-negative" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 12-14, 17, 19-20, and 22-23, are rejected under 35 U.S.C. 102(b) as being anticipated by Henson (5,134,393).

As per claim 12, Henson discloses a traffic control system for use in reducing traffic congestion including: a plurality of non-negative acceleration control units, each of plurality of

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control units including a reception unit and a transmission unit, wherein a plurality of reception units may be controlled by one of said transmission units (see columns 6-7, lines 13-2), each of plurality of reception units operatively coupled with a vehicle's acceleration system (see column 8, lines 1-17), and wherein at least a portion of non-negative acceleration control units are activated when a speed detection device detects that a vehicle has reached a low threshold speed, wherein reception units are activated by a transmitter at an entrance to a traffic congestion reduction zone (see columns 4-5, lines 42-32; and columns 8-9, lines 61-51).

As per claim 13, Henson discloses a non-negative acceleration governor operatively coupled to a vehicle acceleration capability, wherein non-negative acceleration governor cannot limit the positive acceleration of said vehicle unless the speed of a vehicle reaches a low threshold (see column 9, lines 11-40), and an activation device coupled to said non-negative acceleration governor is activated only by activation device (see columns 8-9, lines 61-51).

As per claim 14, Henson discloses a distance detection device in activation unit, distance detection device being for detecting a distance between two vehicles (see column 3, lines 12-25; column 4, lines 31-4; and column 8, lines 61-67)

As per claim 17, Henson discloses a receiver operatively coupled to activation device (see columns 3-4, lines 39-41).

As per claim 19, Henson discloses a method for reducing traffic congestion including the acts of: placing an acceleration limiting reception device in each of a plurality of vehicles (see column 8, lines 1-17), activating at least one of plurality non-negative acceleration limiting reception devices in a congestion reduction zone (see columns 8-9, lines 61-51); and transmitting instructions to at least one of plurality of acceleration limiting reception devices in at least one

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vehicle located in congestion reduction zone (see columns 6-7, lines 13-2), and transmitted instruction cause the non-negative acceleration of a vehicle to be limited (see column 8, lines 1-60).

As per claim 20, Henson discloses activation takes place when a traffic event is detected (see column 8, lines 37-60).

As per claim 22, Henson discloses transmitter is located at the base on an on ramp, such that a vehicle may not enter a highway until instructions are transmitted to acceleration limited reception device (see column 10, lines 1-43).

As per claim 23, Henson discloses a method for controlling the flow of traffic in a highway merge area including the acts of: placing an acceleration limiting reception device in each of a plurality of vehicles (see columns 4-5, lines 42-32; and column 8, lines 1-17), activating at least one of said plurality acceleration limiting reception devices in a merge congestion zone, wherein merge congestion zone includes at least a stretch of an on-ramp and a portion of a travel lane prior to its connection to merge (see columns 8-9, lines 61-51), transmitting instructions to at least one of plurality of acceleration limiting reception devices in at least one vehicle in travel lane and one merging vehicle located in stretch of on-ramp, located in merge congestion zone, and transmitting instructions to at least one of plurality of acceleration limiting reception devices in at least one vehicle and one merging vehicle located in merge congestion zone (see column 5, lines 33-65), and transmitted instruction cause the non-negative acceleration of a vehicle to be limited (see column 8, lines 1-60).

Claim Rejections - 35 USC § 103

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson (5,134,393) in view of Andreas et al. (6,094,616).

As per claim 15, Henson does not disclose a threshold distance. However, Andreas et al. disclose activation unit activates non-negative acceleration unit when a threshold distance is detected (see columns 3-4, lines 57-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Henson by combining a threshold distance detection to control spacing between vehicles.

As per claim 16, Andreas et al. disclose low threshold speed is Zero (see column 4, lines 15-56).

7. Claim 18, is rejected under 35 U.S.C. 103(a) as being unpatentable over Henson (5,134,393) in view of Lees et al. (6,483,443).

As per claim 18, Henson, does not disclose receiver is configured to receive EMF signals. However, Lees et al. disclose receiver is configured to receive EMF signals corresponding to a non-negative acceleration limit, said activation device translating said EMF signals and providing them to non-negative acceleration governor (see columns 1-2, lines 60-25; and column 5, lines 48-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Henson, by combining receiver is configured to receive EMF signals for accurately control speed and spacing of vehicles.

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8. Claim 21, is rejected under 35 U.S.C. 103(a) as being unpatentable over Henson (5,134,393) in view of Lichtenberg et al. (6,459,983).

As per claim 21, Henson, does not disclose deactivating at least one of plurality of acceleration limiting device. However, Lichtenberg et al. disclose deactivating at least one of plurality of acceleration limiting device (see column 3, lines 3-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Henson by combining deactivating at least one of plurality of acceleration limiting device to maintain vehicle spacing when the speed and distance has been adjusted to assure vehicle safety.

Remarks

9. Applicant's argument filled on 7/22/05 have been fully considered but they are not deemed to be persuasive. Upon review the prior art references, the new ground of rejection as above, no new references in this rejection.

The response to the remarks on page 5 of the amendment, applicant's argue about claim 12 as follow. Claim 12, in line 2, " plurality of non-negative acceleration control units".

"Non-negative acceleration" as claim is just a regular "acceleration", because:

"negative acceleration" = deceleration, therefore,

"non-negative acceleration"= non-deceleration = acceleration

also, see applicant's note in line 6, page 3 of the specification "accelerations (non-negative acceleration)". Therefore, claim 1, line 2, " plurality of non-negative acceleration control units" is means "plurality of acceleration control units".

Applicant's argument on page 5, paragraph 4 of the amendment that Henson does not teach a "non-negative acceleration". However, Henson discloses a control system can be used

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to provide speed up or slow down commands to the vehicle (column 8, lines 6-7), also, “slow movement away from the driver would be a request to the driver to speed up slightly, slow movement toward the driver would mean to slow down slightly” (column 5, lines 1-7), and the system of Henson “to improve flow in high density traffic” (column 5, lines 16-18). It is obvious that “speed up” is an acceleration control, and as discussed above, “non-negative acceleration control unit” is just a regular acceleration control unit. Therefore, Henson system include “non-negative acceleration control unit”.

Also, applicant’s argue on page 6, lines 5-8, second paragraph of the amendment that “The non-negative acceleration feature of the present claims allows the traffic flow systems to be implement without the need for a fail safe mechanism which does not ever, under any circumstance, to slow the vehicle down or to indicate to the driver to slow down”. It is not make sense to one of ordinary skill in the art, that under the situation if there is a “slow movement **toward the driver,**” in this condition, if the vehicle system to be implement without the need for a fail safe mechanism which does not ever, under any circumstance, to slow the vehicle down, how can the vehicle to slow down to avoid the movement toward the driver to avoid the collision. The “slow down” control in the Henson system only request when there is “slow movement toward the driver”; however, the “speed up” (or faster movement) control is request when there is “slow movement away from the driver” (column 5, lines 1-4), and “faster movement would indicate to the driver that his vehicle is further away in speed or spacing from the speed/place where the traffic control computer wants his vehicle” (column 5, lines 4-7). Therefore, Henson system teach the non-negative acceleration feature of the present claims.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Dalena Tran



September 30, 2005